

CLEAN COPY OF THE AMENDMENTS

IN THE SPECIFICATION

A After the title, please insert <sup>1</sup> This application is a National Phase Application of Patent Application **PCT/EP00/03267** filed on 12 April 2000--

IN THE CLAIMS:

Please substitute claims ~~1-14~~ as follows.

- 201110-1650001
1. (Amended) A highly scratch-resistant multicoat clearcoat system A for a primed or unprimed substrate, produced by
- (1) applying at least one clearcoat film I of a coating material I curable thermally and with actinic radiation to the surface of the substrate, and partially curing it,
  - (2) applying a further clearcoat film II of a coating material II comprising nanoparticles and curable with actinic radiation and optionally thermally, to the surface of the clearcoat film I, and
  - (3) curing the clearcoat films I and II conjointly with actinic radiation and thermally.
2. (Amended) A highly scratch-resistant multicoat clearcoat system A for a primed or unprimed substrate, produced by
- (1) applying at least one clearcoat film I of a coating material I curable thermally and with actinic radiation to the surface of the substrate, curing it and roughening it,
  - (2) applying a further clearcoat film II of a coating material II comprising nanoparticles and curable with actinic radiation and optionally, thermally, to the outer surface of the clearcoat film I, and
  - (3) curing the clearcoat film II with actinic radiation and, optionally, thermally.
- A<sup>2</sup>

3. (Amended) A highly scratch-resistant, multicoat color and/or effect coating system B for a primed or unprimed substrate, produced by

- (1) applying at least one color and/or effect basecoat film III of a pigmented coating material III curable thermally and, optionally, with actinic radiation, to the surface of the substrate and drying it without curing,
- (2) applying at least one clearcoat film I of a coating material I curable thermally and with actinic radiation wet-on-wet to the surface of the basecoat film III, and partially curing them,
- (3) applying a further clearcoat film II of a coating material II comprising nanoparticles and curable with actinic radiation and, optionally, thermally, to the surface of the clearcoat film I, and
- (4) curing the basecoat film(s) III and the clearcoat films I and II conjointly with actinic radiation and thermally.

4. (Amended) A highly scratch-resistant multicoat color and/or effect coating system B for a primed or unprimed substrate, made by

- (1) applying at least one color and/or effect basecoat film III of a pigmented coating material III curable thermally and, optionally, with actinic radiation to the surface of the substrate and drying it without curing,
- (2) applying at least one clearcoat film I of a coating material I curable thermally and with actinic radiation wet-on-wet to the surface of the basecoat film III,
- (3) curing the basecoat film III and clearcoat film(s) I conjointly, thermally and with actinic radiation,
- (4) roughening the outer surface of the clearcoat film(s) I,

- (5) applying a further clearcoat film II of a coating material II comprising nanoparticles and curable with actinic radiation and, optionally thermally, to the outer surface of the clearcoat film I, and
- (6) curing the clearcoat film II with actinic radiation and, optionally, thermally.

5/ (Amended) A process for producing a highly scratch-resistant multicoat clearcoat system (A) on a primed or unprimed substrate, comprising

- (1) applying at least one clearcoat film I of a coating material I curable thermally and with actinic radiation to the surface of a substrate, and partially curing it, and
- (2) applying a further clearcoat film II of a coating material II comprising nanoparticles and curable with actinic radiation and, optionally thermally, to the surface of the clearcoat film I, and then
- (3) curing the clearcoat films I and II conjointly with actinic radiation and thermally.

6/ (Amended) A process for producing a highly scratch-resistant multicoat clearcoat system A on a primed or unprimed substrate, comprising

- (1) applying at least one clearcoat film I of a coating material I curable thermally and with actinic radiation to the surface of a substrate, curing it and roughening it,
- (2) applying a further clearcoat film II of a coating material II comprising nanoparticles and curable with actinic radiation and, optionally thermally, to the outer surface of the clearcoat film(s) I, and
- (3) curing the clearcoat film II with actinic radiation and, optionally thermally.

7. (Amended) A process for producing a highly scratch-resistant multicoat color and/or effect coating system B on a primed or unprimed substrate, comprising

- (1) applying at least one color and/or effect basecoat film III of a pigmented coating material III curable thermally and, optionally, with actinic radiation to the surface of the substrate and drying it without curing,
- (2) applying at least one clearcoat film I of a coating material I curable thermally and with actinic radiation wet-on-wet to the surface of the basecoat film III, and partially curing them,
- (3) applying a further clearcoat film II of a coating material II comprising nanoparticles and curable with actinic radiation and, optionally, thermally, to the surface of the clearcoat film I, and
- (4) curing the basecoat film(s) III and the clearcoat films I and II conjointly with actinic radiation and thermally.

8. (Amended) A process for producing a highly scratch-resistant multicoat color and/or effect coating system B on a primed or unprimed substrate, comprising

- (1) applying at least one color and/or effect basecoat film III of a pigmented coating material III curable thermally and, optionally, with actinic radiation to the surface of the substrate and drying it without curing,
- (2) applying at least one clearcoat film I of a coating material I curable thermally and with actinic radiation wet-on-wet to the surface of the basecoat film III,
- (3) curing the basecoat film III and clearcoat film I conjointly, thermally and with actinic radiation,
- (4) roughening the outer surface of the clearcoat film I,

- (5) applying a further clearcoat film II of a coating material II comprising nanoparticles and curable with actinic radiation and, optionally, thermally, to the outer surface of the clearcoat film I, and
- (6) curing the clearcoat film II with actinic radiation and, optionally, thermally.

9. (Amended) The clearcoat system A of claim 1, wherein the coating material II comprises nanoparticles based on silicon dioxide, aluminum oxide and zirconium oxide.

10. (Amended) The clearcoat system A of claim 1 wherein the coating material I comprises

(a1) at least one constituent comprising

(a11) at least two functional groups which serve for crosslinking with actinic radiation, and optionally

(a12) at least one functional group which is able to undergo thermal crosslinking reactions with a complementary functional group (a22) in the constituent (a2), and

(a2) at least one constituent comprising

(a21) at least two functional groups which serve for crosslinking with actinic radiation, and

(a22) at least one functional group which is able to undergo thermal crosslinking reactions with a complementary functional group (a12) in the constituent (a1), and optionally,

one or more members selected from the group consisting of

(a3) at least one photoinitiator,

(a4) at least one thermal crosslinking initiator,

(a5) at least one reactive diluent curable thermally and/or with actinic radiation,

(a6) at least one coatings additive,  
(a7) at least one thermally curable constituent,  
and mixtures thereof, with the proviso that the coating material I comprises at  
least one thermally curable constituent (a7) if the constituent (a1) contains no  
functional group (a12).

11. (Amended) The clearcoat system A of claim 10, wherein the functional  
groups (a11) and (a21) comprise olefinically unsaturated groups or epoxide  
groups.

12. (Amended) The clearcoat system A, wherein the constituent (a1) comprises  
a urethane (meth)-acrylate and the constituent (a2) comprises a member  
selected from the group consisting of (meth)acrylate-functional (meth)acrylate  
copolymer containing free isocyanate groups, (meth)acrylate-functional  
polyisocyanate, and mixtures thereof.

13. (Amended) The process of claim 5, wherein the substrate is selected from  
the group consisting of automotive OEM substrates, automotive refinish  
substrates, plastics substrates, furniture substrates, coil substrates and  
container substrates.

14. (Amended) An article selected from the group consisting of motor vehicles,  
plastic parts, furniture items, industrial parts, coil, and containers, produced  
by the process of claim 5.